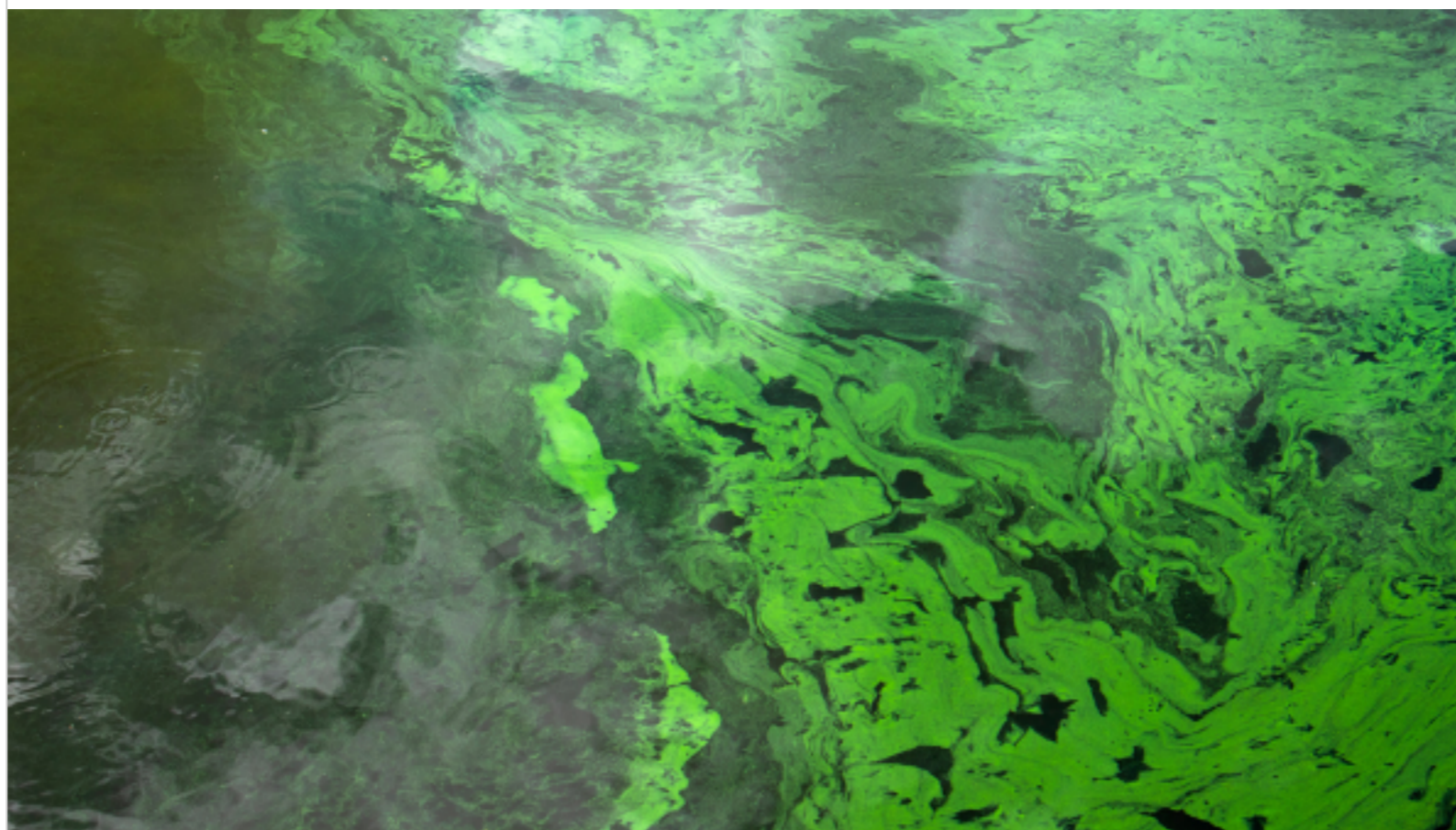


CCEE Summer 2024 News

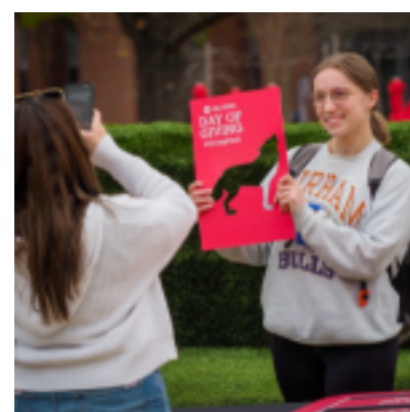
A Newsletter of the Department of Civil, Construction, and Environmental Engineering



CCEE faculty to advance understanding of toxic algae blooms as part of new NSF, NIEHS Center

CCEE faculty members [Dan Obenour](#) and [Casey Dietrich](#) will join colleagues across NC State University to lead a research effort to improve the monitoring and management of harmful algae blooms. Research, funded by the National Science Foundation and the National Institute of Environmental Health Sciences, will focus on issues relevant to ocean and human health. The North Carolina Center for Coastal Algae, People and Environment (NC C-CAPE) will bring together researchers from five colleges at NC State and is funded by a five-year, \$6.9 million grant.

[Explore the center's research →](#)



CCEE receives a record 333 gifts totaling \$195,641 on Day of Giving

NC State held its sixth annual Day of Giving on Wednesday, March 20, and once again, alumni, friends, parents, faculty, staff and students showed up strong for 24 hours of #GivingPack. The CCEE department was declared the winner of the College of Engineering Leaderboard with 333 gifts totaling \$195,641. The department received \$10,700 from the CCEE Advisory Board for completing a match challenge of 200 gifts.

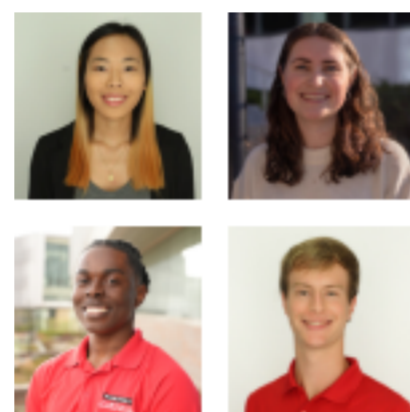
[Read about the day's highlights →](#)



CCEE grad leads study on meeting India's appetite for water, energy

With roughly one-sixth of the world's population, India's increasing needs for food, water and energy are crucial for its sustainable development. Recent CCEE graduate student Aditya Keskar (Ph.D. 2023) responded to this pressing challenge by dedicating his doctoral research to the betterment of his homeland. He focused on solar water pumps, which offer irrigation to farms while avoiding the greenhouse gas emissions and air pollution caused by diesel pumps.

[Look into the details of the study →](#)



Four CCEE graduates win 2024 Outstanding Senior Awards

Each spring, the department recognizes exceptional undergraduate students with four Outstanding Senior Awards. This year, the awards went to: Grace Gould for Humanities, Zoe Smith for Leadership, Alvin Mutongi for Citizenship and Service, and Brandon Tucker for Scholarly Achievement.

[Learn about this year's winners →](#)



New traffic signal would improve time for pedestrians, vehicles

A new study from CCEE researchers shows that adding a fourth light to traffic signals – in addition to red, green and yellow – would shorten wait times at street corners for pedestrians, as well as improve traffic flow for both autonomous vehicles and human drivers. And the more autonomous vehicles there are in the traffic network, the shorter the wait times for everyone.

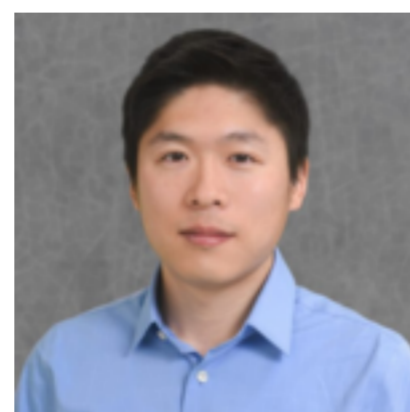
[Read about the findings →](#)



Five graduate students face off in CCEE's 7th annual Three Minute Thesis Competition

Five CCEE Ph.D. students competed in the department's 7th Annual Three Minute Thesis Competition on March 4 at Fitts-Woolard Hall, presenting their research to an audience of judges and colleagues. Each student had three minutes and one static visual slide to make a compelling and concise statement about their thesis topic and its significance to society.

[Explore the students' research →](#)



Kevin Han tapped for Daniel W. Halpin Award for Scholarship in Construction

Professor and Edward I. Weisiger Distinguished Scholar Kevin Han won the 2024 Daniel W. Halpin Award for Scholarship in Construction from the American Society of Civil Engineers' Construction Institute. The award was established to recognize individuals with outstanding scholarship that advances construction engineering as a science. Han was selected for his innovative contribution to advances in construction automation and robotics, teaching innovations and services to the academic community.

[Learn more about Han's accomplishments →](#)



CCEE Enhancement Fund

Your contribution to the CCEE Enhancement Fund will make an immediate impact and provide critical support for our department.

[Click here to give →](#)

Oct
7

23rd Annual Paul Zia Distinguished Lecture →

Nov
1

2024 CCEE Hall of Fame Induction Ceremony →

CCEE IN THE NEWS

Research Associate Professor and Constructed Facilities Laboratory Manager Greg Lucier was featured in two separate WRAL stories discussing bridge safety and NC State's Constructed Facilities Lab. →

Associate Professor Ali Hajbabaie appeared on news stations WCNC, CBS 17 and WRAL to discuss his research on adding a fourth light on traffic signals to help traffic flow with autonomous vehicles. →

Glenn E. and Phyllis J. Futrell Distinguished Professor Francis de los Reyes joined podcast Audio Abstract to discuss the challenges involved in improving sanitation practices both at home and abroad. →

A recent New York Times article looking into the Environmental Protection Agency's order to remove forever chemicals known as PFAS from tap water features a photo of CCEE students and researchers working in the environmental lab. →

The Guardian chatted with Associate Professor Jeremiah Johnson about a new study that examines the climate and health benefits of increasing renewable energy use. →